Analysis

Fiscal policy and debt sustainability in the euro area since the COVID-19 pandemic and energy crisis

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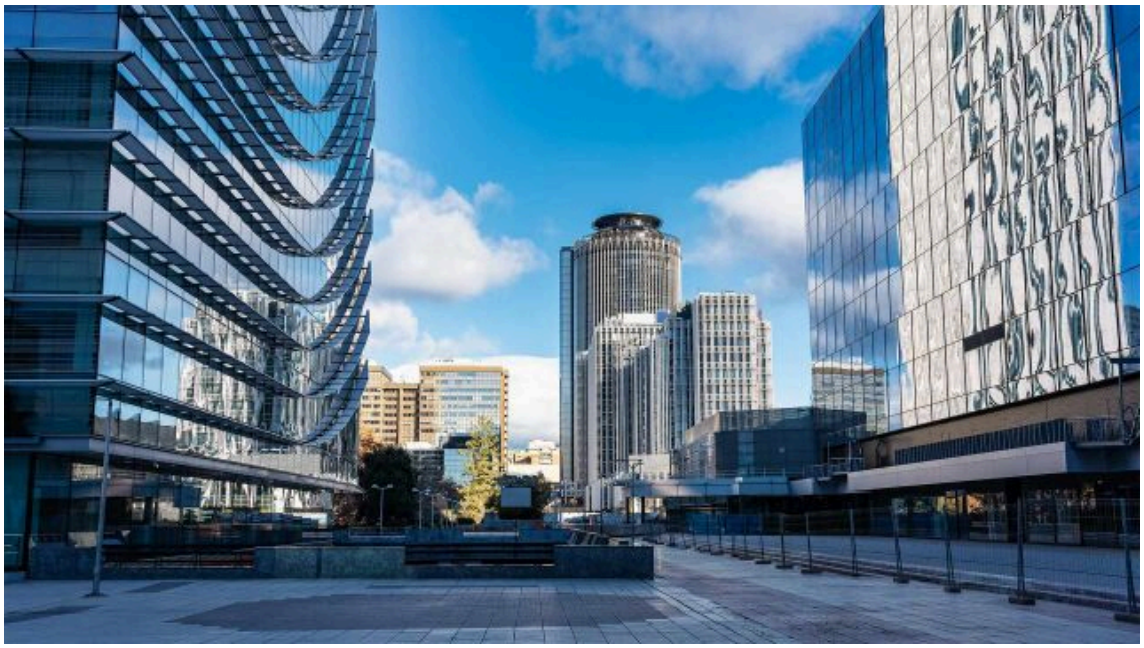
Structural deficits in euro area countries have become substantial compared with the pre-pandemic situation. The sustainability of government debt levels depends on the size of the interest rate-growth differential and primary balances. These are affected by various structural factors ranging from the green transition to the fragmentation of the global economy. The revised EU fiscal rules aim to improve primary balances and consequently strengthen the debt sustainability of EU Member States.

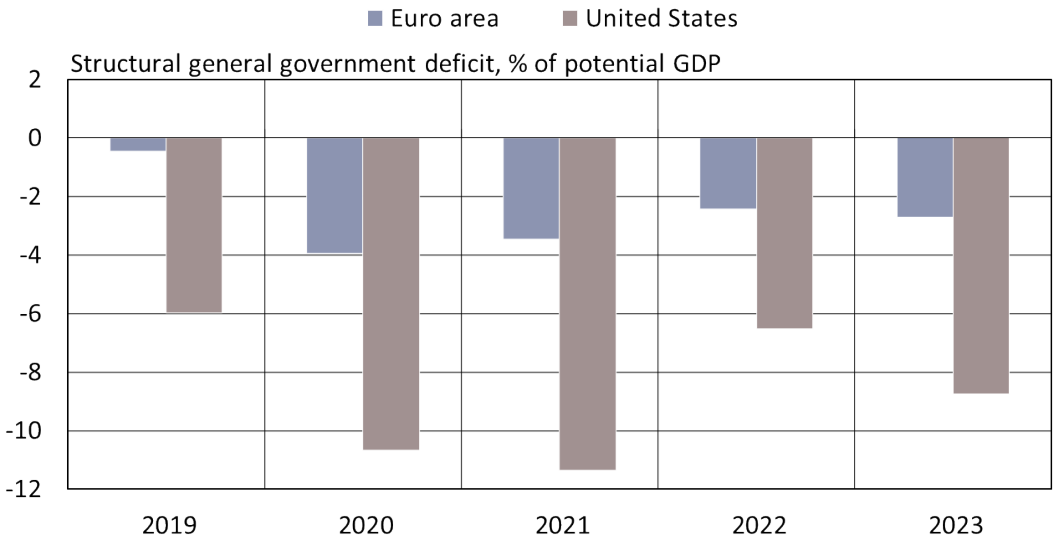


Structural deficits in the euro area and the United States have been substantial

Measured in structural terms (i.e. cyclically adjusted), general government deficits in the euro area countries and in the United States are still elevated and have not yet returned to their pre-pandemic level.[1] In fact, it could be argued that, to date, only part of the fiscal stimulus (in comparison with the pre-pandemic situation) has been discontinued. In 2023, the structural deficit was just over 2 percentage points higher in the euro area, and around 2.5 percentage points higher in the United States, than in 2019, according to calculations by the International Monetary Fund (IMF) (Chart 1).

Chart 1.

Public sector structural deficit in euro area and United States, 2019–2023, % of GDP



Source: IMF World Economic Outlook.
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In both the euro area and the United States, monetary policy was first eased during the worst year of the COVID-19 pandemic, in 2020, but following decisions made at the end of 2021, monetary policy was tightened significantly in response to inflation, which was rapidly accelerating and also broadening and persisting. Key interest rates were raised at a record pace in the euro area from July 2022, and in the United States from March 2022. The central banks have also started reducing their balance sheets through quantitative tightening (QT). International organisations such as the OECD and the IMF have recently issued warnings over the imbalance between monetary and fiscal policy.

Academic research on the roles played by different factors – including fiscal policy – in the recent surge in inflation has been rather limited. However, the view that inflation in 2021–2023 was caused by supply shocks in particular has been supported (see e.g. Bernanke and Blanchard, 2023 and the 2024 Bank of Finland Bulletin article by Oinonen and Vilmi). At the same time, the expansionary fiscal policy caused a demand shock, which contributed at the least to a prolonging of the period of high inflation. Assessments that place greater weight on the impact of fiscal policy in driving inflation have also been made (e.g. Barro and Bianchi, 2023).

New studies have been conducted recently on the combined effect of fiscal and monetary policy in bringing down inflation. In a recent IMF study, Beyer et al. (2023) assessed the significance of fiscal-monetary policy interactions in euro area conditions using an empirical VAR (vector autoregression) model and two discrete DSGE (dynamic stochastic general equilibrium) macroeconomic models. The main conclusion of the study is that even rather minor fiscal consolidation would enable a significant reduction to be made in short-term interest rates. At the same time, a fiscal contribution to curbing inflation would reduce the risk of fragmentation in the euro area, according to the researchers.

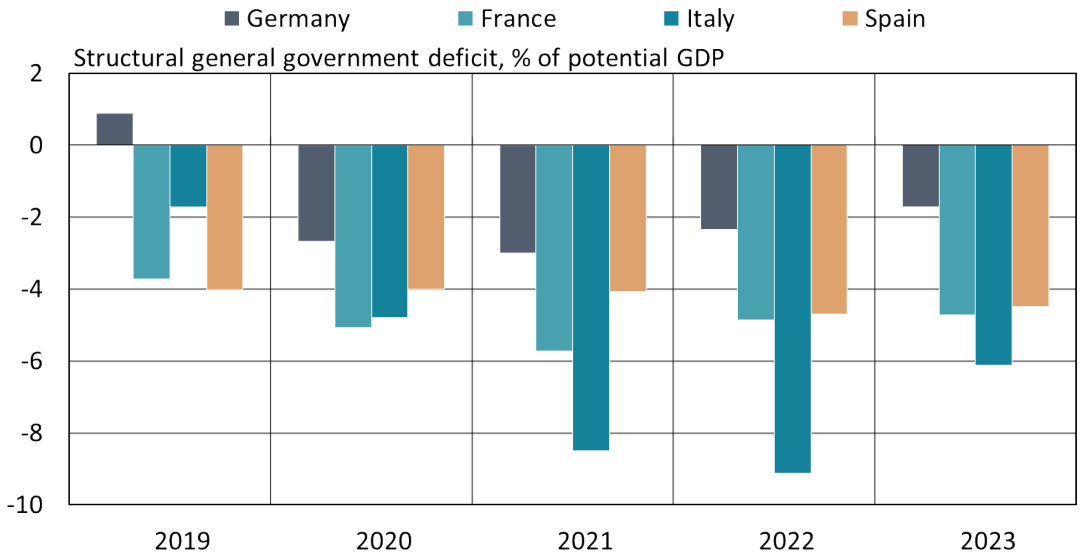
Another article by IMF economists, Chen et al. (2023), which makes use of structural models in its assessment, concludes that concerted fiscal consolidation in different economies would, in this situation, be a particularly cost-effective way to reduce inflationary pressures as well, because when many countries are tightening their monetary policy simultaneously, exchange rates will not move as much and the exchange rate channel of monetary policy will be ineffective.

Differences in sustainability of general government debt among major euro area economies

When comparing structural deficits for 2023 with the 2019 figures, the conclusion, in the case of each of the largest economies of the euro area, is similar to that for the United States and for the whole of the euro area. In 2023, structural deficits had not returned to 2019 levels in Germany, France or Spain, or in Italy either, according to the European Commission's calculations (Chart 2). The greatest difference between the structural deficits in 2023 and 2019 was in Italy, where fiscal policy has been highly accommodative. The narrowest gap between the structural deficits of 2019 and 2023 was in Spain. The euro area's fiscal policy stance is not specifically based on that of any single large Member State. In fact the fiscal stance of the major euro area countries showed a fairly similar alignment during 2020–2023, although some differences in the strength of policy measures can also be observed.

Chart 2.

Public sector structural deficit in Germany, France, Spain and Italy, 2019–2023, % of GDP



Source: European Commission.
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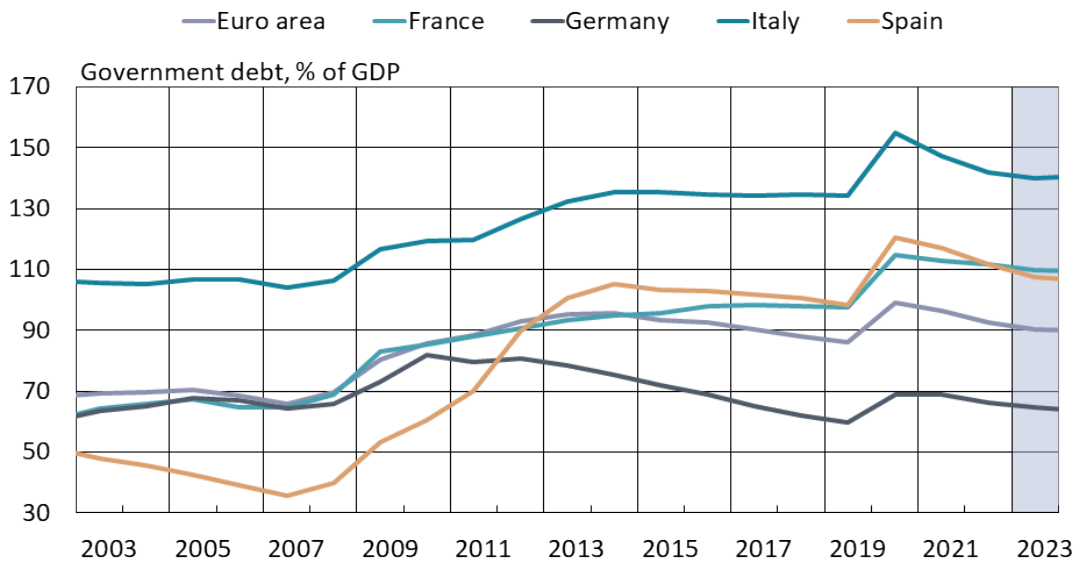
Government debt relative to GDP has indeed grown in the euro area from the pre-pandemic level. This is despite that fact that in the past two to three years, debt relative to GDP started to contract slightly due to tighter fiscal policy and brisk nominal GDP growth amid higher inflation (Chart 3). Nevertheless, the general government debt-to-GDP ratio is rather high in the major euro area countries, with the exception of Germany, and clearly above the 60% reference value set in the Maastricht Treaty. Italy's government debt, which was almost 140% relative to GDP at the end of 2023, was the furthest from the reference value among the countries compared. The size of the debt poses a threat to fiscal sustainability in the case of some euro area countries, and adds to the risk of fiscal dominance, a situation in which general government deficits and increased government debt begin to limit the ability of monetary policy to maintain price stability.[2]

Chart 3.

Government debt in major euro area economies, 2003–2023



Source: European Commission forecast.
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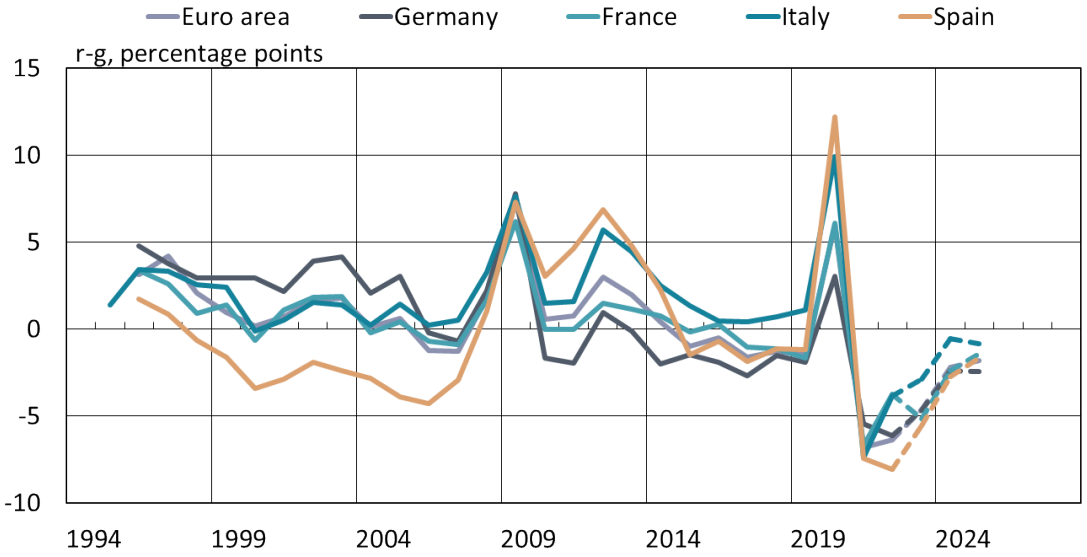
On the basis of the public debt equilibrium equation popularised by Olivier Blanchard, debt accumulation can be shown to be on a path of stable development when the difference between the (nominal) interest rate '*r*' and the (nominal) growth rate '*g*' is negative, in other words in a situation in which $r < g$ and the primary balance is sufficiently high.[3]

Chart 4.

Interest rate-growth differential in major euro area economies, 1995–2025



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Looking at recent history, we can see that movements in the interest rate-nominal growth differential in the euro area became highly favourable to debt accumulation in 2021, when the recovery from the pandemic was coupled with real GDP growth at a good level and interest rates were very low (Chart 4).[4] In 2022 this differential remained more or less unchanged despite the slowing of real GDP growth, because the GDP deflator grew at a faster rate due to higher inflation. In 2023, the interest rate-nominal growth differential remained quite favourable to debt accumulation despite the slowing of real GDP growth and higher interest rates, because the GDP deflator growth accelerated to a record 5.9% according to a Commission forecast.

GDP deflator growth is projected to slow substantially in 2024–2025. Although real GDP growth is forecast to pick up slightly at the same time, this means that the interest rate-nominal growth differential will return to near the pre-pandemic level.

Sustainability of debt is influenced by many factors

Although the forecast for 'r-g' in the immediate years ahead seems moderate from the perspective of debt sustainability, there are various risks related to high debt levels and the stability of debt. The ECB has also been tightening its monetary policy by reducing the size of its balance sheet from 2022 or, using another definition, from 2023.[5] High debt levels combined with quantitative

tightening are placing upward pressure on government bond yields. Governments will continue to take on significant amounts of new debt in the immediate years ahead while maturing bonds will also have to be rolled over. In order for the increased supply to meet the market demand, the yield received by a marginal investor on a sovereign bond would have to rise while all other factors remain constant.

The interest rate-growth differential is also affected by several structural factors that are beyond the control of the monetary and fiscal authorities. If the economy's natural equilibrium interest rate also rises for structural reasons at the same time as both quantitative tightening and rising bond yield requirements continue, the interest rate-growth differential could turn positive for a longer period (a situation in which the interest rate is higher than the growth rate).[6] In such a situation, without primary balances being brought into positive territory, debt in relation to GDP would start growing again in euro area countries. In other words, growth would not be sufficient to stabilise the debt ratio.

However, according to various assessments, there is little evidence of an increase in the economy's equilibrium interest rate (see info box for more detail). According to Obstfeld (2023), the natural equilibrium interest rate may have risen temporarily, but structural factors, including demographic changes, poor productivity performance, the indirect impacts of companies' increased monopoly power, and the demand for safe investment products, will keep the equilibrium interest rate low in the future, too. The reducing effect of greater life expectancy on the (natural) equilibrium interest rate of the economy is also highlighted by Cesa-Bianchi et al. (2023). However, fragmentation of the global economy has been put forward as a new potential risk factor regarding a rise in equilibrium interest rates.

In the assessment presented by Obstfeld (2023), the natural (neutral) real equilibrium interest rate in the United States is currently 0.5%–2%. The corresponding real equilibrium interest rates for the euro area are estimated to be around a percentage point lower.[7] Nevertheless, it is important to note that the structural factors mentioned by Obstfeld also exert downward pressure on the growth rate. Therefore, a decrease in the equilibrium interest rate is not in itself a sufficient condition for the realisation of debt sustainability. The interest rate-growth differential is a key factor for debt sustainability.

When the interest rate is higher than the growth rate, the debt ratio can only be in balance or contracting if the general government primary surplus is sufficiently high. However, raising primary balances in the immediate years ahead is complicated by the fact that there are many pressures on public spending: population ageing in Western countries is continuing, causing pressures on pension and care expenditure, and additional resources are needed in defence

spending due to the geopolitical situation, while the aim is also to promote the green transition through investments and tax incentives. In any case, the primary balance is the variable in the equilibrium equation that is most firmly under the control of the fiscal authorities.

Revised fiscal rules seek to support debt sustainability in EU countries

Since neither the fiscal policy stance nor debt sustainability can be left to rely on the growth rate exceeding the interest rate on a permanent basis, decision-makers should pay attention to primary balances, as these are what can be directly influenced by decision-makers. After being suspended at the beginning of the pandemic, the revised EU fiscal rules will, from this year onwards, (again) be supporting the fiscal sustainability objectives of the EU countries.[8] Under the new fiscal rules, the EU Treaty reference values of 60% of GDP for public debt and 3% of GDP for government deficits remain unchanged, but each Member State is required to submit a fiscal-structural plan covering a period of four to five years. After this period, the general government debt ratio must be on a plausibly downward path or stay below 60% of GDP, and the deficit must be below 3% of GDP over the medium term.

The adjustment period may be extended to seven years if, in addition to fiscal adjustment, a Member State introduces structural reforms and investments which improve potential output and are approved by the European Commission. An essential feature of the new fiscal rules is that the attainment of the deficit and debt objectives is ensured by means of the so-called net expenditure rule (government expenditure net of cyclical unemployment expenditure and interest payments[9]). The expenditure rule is binding for countries with a debt ratio above 60% of GDP or a deficit above 3% of GDP. The Commission issues the expenditure rule for a Member State on the basis of a medium-term debt sustainability analysis (DSA). The expenditure rule is set so that the debt ratio will most likely begin to decline no later than after the adjustment period. In setting the expenditure rule, account is also taken of specific 'safeguards' governing the debt and deficit paths.

The 'debt sustainability safeguard' requires that the debt-to-GDP ratio decreases by an annual average of at least 0.5 percentage points in countries where the ratio is over 60% but under 90%, or at least 1 percentage point in countries where it exceeds 90%. The purpose of the 'deficit resilience safeguard' is to bring the general government deficit to a level that provides a sufficient safety margin relative to the reference value of 3% of GDP and allows the conduct of countercyclical policies. A safe level is defined as a structural deficit of 1.5% of potential GDP. If there is a deviation from this, the structural deficit must be improved annually by 0.4% of potential

GDP, or 0.25% of potential GDP if the adjustment period has been extended to seven years.

Compliance with the net expenditure rule is monitored, and any annual deviations are recorded in a 'control account'. If the deviations exceed the limits set (0.3% annually or 0.6% cumulatively), there are grounds for opening a debt-based excessive deficit procedure (EDP).

An EDP may also be opened if a country's deficit exceeds the reference value (3%). In such a case, the structural deficit must be adjusted by a minimum annual amount of 0.5% of potential GDP (excluding interest expenditure, which will exceptionally not be taken into account until 2027).

The new fiscal rules also emphasise the possibility that a Member State's fiscal adjustment period may be extended against investment in, for example, the green transition or defence, provided that such plans are approved by the Commission. The independent European Fiscal Board (EFB) would also be given a greater advisory role in assessing fiscal stances and EU-level fiscal governance, and in identifying exceptional circumstances.

According to a quick assessment by Zettelmeyer (2023), the new fiscal rules exhibit both strengths and weaknesses. Zettelmeyer considers the weaknesses to be the excessively detailed guidance on the pace for reaching the 1.5% deficit safety margin, the exclusion of interest payments on debt from the corrective net expenditure path until 2027, the inclusion of public investment in the deficit safety margin and the weakened role of national independent fiscal institutions (IFIs) compared to the Commission's initial proposal. The strengths include, in particular, the country-specific requirements determined by debt sustainability analysis and the use of a net expenditure path as the main operational target.

Darvas et al. (2023) assess the implications of the new fiscal rules on the basis of each Member State's current fiscal position. They find that the new rules would require very significant structural primary surpluses from countries such as Belgium and Italy (over 2% of potential GDP from Belgium, and well over 3% or even 4% of potential GDP from Italy).[10]

A key element of the new rules is the adoption of a differentiated approach towards each Member State in assessing fiscal policy and the evolution of debt. In this regard, Padrini (2019) makes an observation on the commitment to fiscal rules in Italy: if the rules are adapted to each Member State's own policy context, this enhances ownership and increases the likelihood of compliance with the rules.

The same observation on ownership and commitment to fiscal rules can be made regarding the introduction of the central government spending limits in Finland (see Kivistö and Lehmus, 2023). Reuter (2019) also finds in his study that independent fiscal monitoring and enforcement bodies increase the probability of compliance with the rules.

Taking ownership of the new fiscal rules would increase the possibility that compliance with them would be better than compliance with the previous rules. On the other hand, it is possible there could be absolutely no improvement in compliance, because of the differentiated approach towards each country, the potentially excessive stringency of the safeguards and the scope for interpretation in the structural reforms. In such a case, it could also be possible that the new fiscal framework would have no impact on actual budget deficits and hence on the sustainability of fiscal policy. In this pessimistic scenario, the new fiscal rules would have little impact on the monetary policy environment.

Public debt sustainability is dependent on both policy and the structures of the economy

The fiscal policy rules will only make a difference if they are complied with. Fiscal policy is important not only in terms of sustainable debt levels but also in terms of central banks' inflation objectives. In recent times, fiscal policy and monetary policy have, at least occasionally, had partially conflicting effects on demand in the economy.

If the new fiscal rules are implemented successfully, they can improve debt sustainability in the EU countries and reduce fiscal procyclicality – the tendency of fiscal policy to amplify cyclical fluctuations – and thereby also facilitate the conduct of monetary policy. But even in this case, there is a risk that the differentiated treatment of countries under the rules will also result in fiscal policy becoming less coordinated between the euro area countries.

Besides being affected by the new EU rules, the sustainability of debt levels will be affected at least as much, and probably much more, by structural factors in the economy, such as population ageing and technological changes. These factors will have a strong impact on debt sustainability, especially in the longer term. Over recent years, the (negative) interest rate-growth differential has allowed even substantial accumulation of debt in the euro area at a seemingly low cost. A reversal of the differential is possible, but if this were to become permanent, it would pose a high risk to the sustainability of public debt in the euro area.

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ⓘ Debt sustainability is also affected by structural changes in the economy

Public debt sustainability is affected not only by discretionary fiscal policy but also – via equilibrium interest rates and the economic growth rate – by structural changes in the economy. Research findings show that the equilibrium real interest rate in the economy (r*) has declined in recent decades due to the indirect effects of increased corporate market power, the demand for safe assets and rising income inequality (Eggertsson et al., 2019; Caballero et al., 2017; and Mian et al., 2021). A further contributory factor is the increase in longevity (Cesa-Bianchi et al., 2023), which is projected to continue (see e.g. Lisack et al., 2021). On the other hand, the rise in the retirement age and more generous social security benefits may have the opposite effect on equilibrium interest rates (Lisack et al., 2021; and Rachel and Summers, 2019).

As many of the factors mentioned above affect both the equilibrium interest rate and growth, their overall impact on debt sustainability is unclear. In recent times, there has also been discussion of how other trends will impact the equilibrium interest rate and economic growth, such as the increased use of artificial intelligence (AI), the restructuring of global production chains and climate change.

If the increased use of AI pushes up productivity and growth and raises the equilibrium interest rate in such a way that the impact on growth is greater than the impact on the equilibrium rate, this may improve the current level of public debt sustainability. On the other hand, trends associated with deglobalisation (i.e. geoeconomic fragmentation), such as the reallocation of global supply chains (see e.g. Alfaro and Chor, 2023), are likely to raise the equilibrium interest rate via higher investment needs and may have a negative impact on economic growth as a whole. As for other major trends, the effects of climate change on the equilibrium interest rate are unclear, as highlighted by, for example, Angeli

et al. (2022). Some of the structural factors mentioned above also entail risks associated with the sustainability of public debt in the euro area. Climate change also increases these risks through other channels, for example by increasing the likelihood of extreme weather events, with adverse effects not only on inflation but also on growth.

The overall impacts of the identified structural factors on the equilibrium interest rate and growth and, consequently, on the risks regarding public debt, are difficult to assess. In particular, estimates of the level and future path of the equilibrium interest rate will be updated many times over. In the longer term, population ageing will be of increasing significance for debt sustainability: the increasing number of older people and longer life expectancy are likely to lower both the equilibrium interest rate and economic growth, increasing the risks to public debt sustainability if economic growth falls by more than the decline in the equilibrium rate. If, on the other hand, it is assumed that ever faster technological change will raise growth more than it raises the equilibrium interest rate, this would also have a positive effect on public debt sustainability.

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Notes

1. In addition to removal of the cyclical impacts, non-recurring and temporary factors are also removed from the structural deficit. ↑
2. On challenges for monetary and fiscal policy interactions in the euro area, see also Bonam et al. (2024) https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op337~fe2b751b27.en.pdf . ↑
3. The temporal development of the debt in relation to GDP can be described formally: where r and g are as above, s is the primary balance, y is the nominal GDP level and b is the nominal debt value. This equilibrium equation popularised by O. Blanchard became widely known via the presidential address given at the 2019 AEA (American Economic Association) meeting. More in-depth information on the equation and debt stability is available in the article by Blanchard (2019). ↑
4. In the chart, the interest rate used is an implicit interest rate calculated using government debt and the interest expenditure paid on it relative to GDP. ↑
5. Actual quantitative tightening started from 2023 (for more details see e.g. Laine and Nelimarkka, 2023). ↑
6. The natural equilibrium interest rate refers to a longer term equilibrium interest rate which balances the savings and investments of an economy when the economy is not subject to shocks. ↑
7. Here, Obstfeld uses r-star estimates for the United States and the euro area presented by Kim, Walsh and Wei (2019) and those originally estimated by Laubach and Williams (2003), which are currently maintained by the Federal Reserve System's regional Federal Reserve Bank in New York, and additionally, r-star estimates maintained by the Federal Reserve System's regional Federal Reserve Bank in Richmond. See https://www.newyorkfed.org/research/policy/rstar. ↑
8. The authors would like to thank Jarkko Kivistö for the valuable observations on fiscal policy rules. ↑
9. The net expenditure rule also takes into account discretionary revenue measures. ↑
10. According to Zettelmeyer (2023), in Italy's case achieving the deficit safety margin would necessitate structural primary surpluses of over 4% of potential GDP. ↑

Keywords

euro area, fiscal policy, structural deficit, USA